COURSE NAME	Linux System Administration (RHCE – RHCT)
OBJECTIVE	This course is intended for those interested or already in a career of system administration. The student will become capable of installing; configuring, optimizing & Administering Linux based systems.
PREREQUISITE:	Working knowledge of computer hardware, software & familiarity with navigating operating systems menus are essential. Student required perform basic UNIX tasks and understand basic UNIX commands.
DURATION	40 Hours
OUTLINES	**Unit 1: Software Management** Objective: Manage packages with yum, rpm, and RHN; build an RPM package and place it in a repository **Unit 2: Network Management** Objective: Configure and troubleshoot network settings; configure network bonding and IP aliases **Unit 3: Storage Management** Objective: Manage partitioning, filesystems, and swap space; configure encrypted partitions and iSCSI initiator **Unit 4: Logical Volume Management (LVM)** Objective: Manage physical volumes, volume groups, and logical volumes with their filesystems **Unit 5: Account Management** Objective: Provide password aging for accounts; use ACLs and SGID directories for collaborative directories **Unit 6: Authentication Management** Objective: Configure an LDAP and Kerberos client; configure autofs to support an authentication client; Configure sudo and SSD **Unit 7: Installation, Kickstart, and Virtualization** Objective: Install a system and manage kickstart and firstboot; use virtualization tools to manage virtual machines **Unit 8: Boot Management** Objective: Configure runlevels and sysctl; reset the root password; understand the boot process **Unit 9 : Security Enhanced Linux (SELinux) Management** Objective: Understand, troubleshoot, and manage SELinux **Unit 10: Firewall Management** Objective: Manage the firewall **Unit 11: Network Time Protocol (NTP) Service** Objective: Configure an NTP server and provide that service to clients **Unit 12: System Logging Service** Objective: Create disk, I/O, and memory usage reports; configure remote logging **Unit 13: Web (HTTP/HTTPS) Service** Objective: Manage a web server with virtual hosts, CGI scripts, and user-based file/directory access controls

Unit 14: SMTP Service
Objective: Null client; outbound smarthost relay; accept inbound connections
Unit 15: Caching-only (DNS) Service
Objective: Configure a caching nameserver and DNS forwarder
Unit 16: File Sharing with NFS
Objective: Manage and secure the NFS service using NFSv3 and NFSv4
Unit 17: C File Sharing with CIFS
Objective: Configure the CIFS to provide home directories, file sharing, and printer service; use a client to access the CIFS shares
Unit 18: File Transfer Protocol (FTP) Service
Objective: Provide anonymous-only download service; provide drop-box upload service
Unit 19: Common UNIX Printing System (CUPS) Service
Objective: Configure and manage local and remote printers
Unit 20: Secure Shell (SSH) Service
Objective: Configure and implement SSH keys
Unit 21: Virtual Network Computing (VNC) Service
Objective: Configure remote desktops and connect to them securely
Unit 22: Comprehensive Review
Objective: Review tasks previously taught in class

EXIT PROFILE	Candidate will be able to appear for RHCT / RHCE certification